SEQUENCE LISTING

<110> Banerjee, Subhashis Taylor, Lori K Spiegler, Clive E Tracey, Daniel E Chartash, Elliot K Hoffman, Rebecca S Barchuk, William T Yan, Philip Murtaza, Anwar Salfeld, Jochen G Fischkoff, Steven <120> TREATMENT OF ANEMIA USING TNF α INHIBITORS <130> BPI-192 <140> <141> <150> 60/397,275 <151> 2002-07-19 <150> 60/411,081 <151> 2002-09-16 <150> 60/417,490 <151> 2002-10-10 <150> 60/455,777 <151> 2003-03-18 <160> 37 <170> FastSEQ for Windows Version 4.0 <210> 1 <211> 107 <212> PRT <213> Artificial Sequence <223> Mutated human antibody <400> 1 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 10 5 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr 20 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 40 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50

```
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                         75
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr
                                    90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 2
<211> 121
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
                                25
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
                                                45
Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
                        55
Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
                                        75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                   90
Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly
Gln Gly Thr Leu Val Thr Val Ser Ser
       115
<210> 3
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<221> VARIANT
<222> 9
<223> Xaa = Thr or Ala
<223> Mutated human antibody
<400> 3
Gln Arg Tyr Asn Arg Ala Pro Tyr Xaa
<210> 4
<211> 12
<212> PRT
<213> Artificial Sequence
```

```
<220>
<221> VARIANT
<222> 12
<223> Xaa = Tyr or Asn
<223> Mutated human antibody
<400> 4
Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Xaa
<210> 5
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 5
Ala Ala Ser Thr Leu Gln Ser
                 5
<210> 6
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 6
Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val Glu
1
Gly
<210> 7
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 7
Arg Ala Ser Gln Gly Ile Arg Asn Tyr Leu Ala
                5
<210> 8
<211> 5
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Mutated human antibody
<400> 8
Asp Tyr Ala Met His
1
<210> 9
<211> 107
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly
1
                5
                                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr
            20
                                25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
                            40
                                                45
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                        75
                    70
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Tyr
                85
                                    90
Ala Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 10
<211> 121
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 10
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Asp Trp Val
                                                45
Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
                        55
Glu Gly Arg Phe Ala Val Ser Arg Asp Asn Ala Lys Asn Ala Leu Tyr
                                        75
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
                                                        95
Thr Lys Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Asn Trp Gly
```

```
Gln Gly Thr Leu Val Thr Val Ser Ser
        115
<210> 11
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 11
Gln Lys Tyr Asn Ser Ala Pro Tyr Ala
1
                5
<210> 12
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 12
Gln Lys Tyr Asn Arg Ala Pro Tyr Ala
                5
<210> 13
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 13
Gln Lys Tyr Gln Arg Ala Pro Tyr Thr
<210> 14
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 14
Gln Lys Tyr Ser Ser Ala Pro Tyr Thr
                 5
```

```
<210> 15
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 15
Gln Lys Tyr Asn Ser Ala Pro Tyr Thr
1
                5
<210> 16
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 16
Gln Lys Tyr Asn Arg Ala Pro Tyr Thr
1
<210> 17
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 17
Gln Lys Tyr Asn Ser Ala Pro Tyr Tyr
                5
<210> 18
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 18
Gln Lys Tyr Asn Ser Ala Pro Tyr Asn
<210> 19
<211> 9
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Mutated human antibody
<400> 19
Gln Lys Tyr Thr Ser Ala Pro Tyr Thr
1
<210> 20
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 20
Gln Lys Tyr Asn Arg Ala Pro Tyr Asn
1
<210> 21
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 21
Gln Lys Tyr Asn Ser Ala Ala Tyr Ser
<210> 22
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 22
Gln Gln Tyr Asn Ser Ala Pro Asp Thr
<210> 23
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 23
```

```
Gln Lys Tyr Asn Ser Asp Pro Tyr Thr
<210> 24
<211> 9
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 24
Gln Lys Tyr Ile Ser Ala Pro Tyr Thr
                5
1
<210> 25
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 25
Gln Lys Tyr Asn Arg Pro Pro Tyr Thr
1
                 5
<210> 26
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 26
Gln Arg Tyr Asn Arg Ala Pro Tyr Ala
<210> 27
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 27
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Asn
                 5
                                    10
```

```
<210> 28
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 28
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Lys
            5
<210> 29
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 29
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Tyr
                5
<210> 30
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 30
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Asp
            5
<210> 31
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
Ala Ser Tyr Leu Ser Thr Ser Phe Ser Leu Asp Tyr
<210> 32
<211> 12
<212> PRT
<213> Artificial Sequence
```

-9-

```
<220>
<223> Mutated human antibody
<400> 32
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu His Tyr
                 5
<210> 33
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
<400> 33
Ala Ser Phe Leu Ser Thr Ser Ser Ser Leu Glu Tyr
                5
<210> 34
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Mutated human antibody
Ala Ser Tyr Leu Ser Thr Ala Ser Ser Leu Glu Tyr
<210> 35
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 35
Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Asn
                5
<210> 36
<211> 321
<212> DNA
<213> Artificial Sequence
<220>
<223> Mutated human antibody
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtagggga cagagtcacc 60
```

```
atcacttgtc gggcaagtca gggcatcaga aattacttag cctggtatca gcaaaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccactt tgcaatcagg ggtcccatct 180
cggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag cctacagcct 240
gaagatgttg caacttatta ctgtcaaagg tataaccgtg caccgtatac ttttggccag 300
gggaccaagg tggaaatcaa a
                                                                   321
<210> 37
<211> 363
<212> DNA
<213> Artificial Sequence
<220>
<223> Mutated human antibody
<400> 37
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ccggcaggtc cctgagactc 60
tcctgtgcgg cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120
ccagggaagg gcctggaatg ggtctcagct atcacttgga atagtggtca catagactat 180
gcggactctg tggagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggat acggccgtat attactgtgc gaaagtctcg 300
taccttagca ccgcgtcctc ccttgactat tggggccaag gtaccctggt caccgtctcg 360
agt
                                                                  363
```